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#### LISTING OF SPECIFICATION AMENDMENTS

Please replace paragraph [0025] with the following amended paragraph:

[0025] Each control processor 104,106 runs all relevant routing protocol applications independently and produces the relevant tables required for packet forwarding. The forwarding information bases (FIB0 108 and FIB1 110) derived from the respective control processors 104,106 are distributed to all STCs 112 regardless of their interface association. It should be noted that the respective FIBs are not necessarily identical, but are expected to contain the same reachability information. The next hop information will most likely not be the same, however. The packet forwarding engine 214 selects a set of FIBs to use at run-time, typically based on control processor association information. In accordance with an embodiment of the invention, A a FIB manager 230 receives FIB information ~~from~~ from the respective control processors 104,106 via busses 109,111 and writes the FIB information in the respective FIB0 108 and FIB1 110. The FIB manager 230 is preferably programmed to write the MPLS FIBs so that the primary LSPs of FIB0 are created and maintained by control processor 104, while the backup LSPs of FIB0 are created and maintained by control processor 106. In FIB1, the primary LSPs are created and maintained by control processor 106, while the backup LSPs are written by control processor 104. Consequently, on transit core network traffic, diversely setup LSPs through the control processors 104,106 permit both line and equipment protection to be achieved in a single router 102 in accordance with the invention.

Please replace paragraph [0027] with the following amended paragraph:

[0027] The monitoring of a control processor to determine whether it is in-service is performed by monitoring critical software processes that it runs. The monitoring of an integrity of critical processes running on a control processor 104,106 is described with reference to FIGs. 3 and 4, and is performed by a heartbeat monitor 220. Integrity of a control processor is defined as being "in-service" or "out-of-service". The heartbeat monitor 220 includes a-tables of critical processes 304 that contain a list of selected processes 404 that run on the respective control processors 104,106. The tables are referenced by a heartbeat inquiry generator 306, which generates heartbeats 306A, 306B, . . . 306C for respectively monitoring the integrity of process 404A, 404B and . . . 404C running on the control processors 104,106. The heartbeat monitor 220 sequentially generates and transmits the heartbeat inquiries 306A,306B,306C to corresponding processes 404A,404B,404C (FIG. 4). If each process 404A,404B,404C returns a heartbeat response 308A,308B, . . . 308C within a predetermined period of time, the integrity of each process is declared "in-service". If any of the processes 404A,404B,404C fails to return a heartbeat response 308A,308B,308C within the predetermined period of time, the integrity of that process 404A,404B,404C and the processor 104,106 that runs it is declared to be "out-of-service".

Please replace paragraph [0034] with the following amended paragraph:

[0034] When a control processor 104 (for the purpose of the following discussion designated CPx) becomes unavailable due to a software crash, hardware fault, or for any other reason except a software upgrade (which is discussed below in some detail) all STCs 112 and the other control processor (designated CPy in this example) are notified. The packet forwarding engine 214 adjusts the control processor mastership of all affected interfaces to associate with

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the remaining control processor CPy. The packet forwarding engine 214 adjusts all UNI Layer 1 and Layer 2 physical and logical port records to associate with the remaining control processor. the packet forwarding engine 214 also adjusts a control processor selection algorithm for any Layer 3 static (stub) interface (either NNI or UNI). CPy operates as if nothing has happened. The ~~CPy~~CPy still advertises its own routes, along with all the local routes of the CPx.